

10/069541

Rec'd PCT/PTO 27 FEB 2002

Please type a plus sign (+) inside this box

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

5

of

5

Complete if Known

Application Number	Unassigned
Filing Date	February 27, 2002
First Named Inventor	Tatsuya HAGA et al.
Group Art Unit	Unassigned 1647
Examiner Name	Unassigned NICKITOC S
Attorney Docket Number	31671-176438

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
CSW	A35	KNIPPER et al., "Purification And Reconstitution Of The High Affinity Choline Transporter", Biochimica et Biophysica Acta, Elsevier Science Publishers B.V., Vol. 1065, pp. 107-113, (1991)	—
CSW	A36	ANDRESEN et al., "Molecular Cloning, Physical Mapping And Expression Of The bet Genes Governing The Osmoregulatory Choline-Glycine Betaine Pathway Of Escherichia Coli", Journal Of General Microbiology, Vol. 134, pp. 1737-1746, (1988)	—
CSW	A37	POCARD et al., "Molecular Characterization Of The bet Genes Encoding Glycine Betaine Synthesis In Sinorhizobium Meliloti 102F34", Microbiology, Vol. 143, pp. 1369-1379, (1997)	—

Examiner
Signature

G. U. [Signature]

Date
Considered

6/23/03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

VENABLE
ATTORNEYS AT LAW

Please type a plus sign (+) inside this box

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 5

Complete if Known

Application Number	Unassigned
Filing Date	February 27, 2002
First Named Inventor	Tatsuya HAGA et al.
Group Art Unit	Unassigned 1647
Examiner Name	Unassigned NICHOLS
Attorney Docket Number	31671-176438

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
GU	A2	DAVIS et al., "Basic Methods In Molecular Biology", Elsevier, pp. 1-3, (1986)	
GU	A3	HAGA, "Synthesis And Release Of [14C]Acetylcholine In Synaptosomes", Journal Of Neurochemistry, Vol. 18, pp. 781-798, (1971)	
GU	A4	"Choline: High-Affinity Uptake By Rat Brain Synaptosomes", Science, Vol. 178, pp. 626-628, (1972)	
GU	A5	HAGA et al., "Choline Uptake Systems Of Rat Brain Synaptosomes", Biochimica et Biophysica Acta, Elsevier Scientific Publishing Company, Vol. 291, pp. 564-575, (1973)	
GU	A6	GUYENET et al., "Inhibition By Hemicholinium-3 of [14C] Acetylcholine Synthesis And [3H]Choline High-Affinity Uptake In Rat Striatal Synaptosomes" Molecular Pharmacology, Academic Press, Inc., Vol. 9, pp. 630-639, (1973)	
GU	A7	BARKER et al., "Comparative Studies Of Substrates And Inhibitors Of Choline Transport And Choline Acetyltransferase", The Journal Of Pharmacology And Experimental Therapeutics, The Williams & Wilkins Co., Vol. 192(1):86-94, (1975)	
GU	A8	KUHAR et al., "Sodium-Dependent, High Affinity Choline Uptake", Journal Of Neurochemistry, Vol. 30, pp. 15-21, (1978)	
GU	A9	TUCEK, "Regulation Of Acetylcholine Synthesis In The Brain", Journal Of Neurochemistry, International Society for Neurochemistry, Vol. 44(1):11-24, (1985)	
GU	A10	HAPPE et al., "High-Affinity Choline Transport Sites: Use of [3H]Hemicholinium-3 As A Quantitative Marker", Journal of Neurochemistry, International Society For Neurochemistry, Vol. 60(4):1191-1201, (1993)	
GU	A11	KUHAR et al., "Choline: Selective Accumulation by Central Cholinergic Neurons", Journal Of Neurochemistry, Vol. 20, pp. 581-593, (1973)	
GU	A12	VICKROY et al., "Reduced Density Of Sodium-Dependent [3H]Hemicholinium-3 Binding Sites In The Anterior Cerebral Cortex Of Rats Following Chemical Destruction Of The Nucleus Basalis Magnocellularis", European Journal of Pharmacology, Elsevier Science Publishers B.V., Vol. 102, pp. 369-370, (1984)	

Examiner Signature

G. Nichols

Date Considered

6/23/03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

VENABLE
ATTORNEYS AT LAW

Please type a plus sign (+) inside this box

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 3 of 5

Complete if Known

Application Number	Unassigned
Filing Date	February 27, 2002
First Named Inventor	Tatsuya HAGA et al.
Group Art Unit	Unassigned 1647
Examiner Name	Unassigned NICHOLS
Attorney Docket Number	31671-176438

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
JS	A13	ELEGANS: Sequence to Biology, "Genome Sequence Of The Nematode C. Elegans: A platform For Investigating Biology", www.sciencemag.org, Vol. 282, pp. 2012-2018, (1998)	
JS	A14	NELSON, "The Family of Na+/Cl-Neurotransmitter Transporters", Journal of Neurochemistry, International Society For Neurochemistry, Vol. 71(5):1785-1803, (1998)	
JS	A15	HEDIGER et al., "Expression Cloning And cDNA Sequencing Of The Na+/Glucose Co-Transporter", Nature, Vol. 330, pp. 379-381, (1987)	
JS	A16	NIKAWA et al., "Primary Structure Of The Yeast Choline Transport Gene And Regulation Of Its Expression", The Journal Of Biological Chemistry, The American Society For Biochemistry And Molecular Biology, Inc., Vol. 265(26):15996-16003, (1990)	
JS	A17	SCHLOSS et al., "The Putative Rat Choline Transporter Chot1 Transports Creatine And Is Highly Expressed In Neural And Muscle-Rich Tissues", Biochemical And Biophysical Research Communications, Vol. 198(2):637-645, (1994)	
JS	A18	SIMON et al., "High Affinity Choline Uptake: Ionic And Energy Requirements", Journal Of Neurochemistry, Vol. 27, pp. 93-99, (1976)	
JS	A19	VICKROY et al., "Sodium-Dependent High-Affinity Binding of [3H]Hemicholinium-3 In the Rat Brain: A Potentially Selective Marker For presynaptic Cholinergic Sites", Life Sciences, Vol. 35, pp. 2335-2343, (1984)	
JS	A20	SANDBERG et al., "Characterization of [3H]Hemicholinium-3 Binding Associated With Neuronal Choline Uptake Sites In Rat Brain Membranes", Brain Research, Elsevier Science Publishers B.V., pp. 321-330, (1985)	
JS	A21	WURTMAN, "Choline Metabolism As A Basis For The Selective Vulnerability Of Cholinergic Neurons", Elsevier Science Publishers Ltd, vol. 15(4):117-122, (1992)	
JS	A22	BISSETTE, et al., "High Affinity Choline Transporter Status In Alzheimer's Disease Tissue From Rapid Autopsy", Annals New York Academy of Sciences, Vol. 777, pp. 197-204, (1996)	
JS	A23	BEERI et al., "Enhanced Hemicholinium binding And Attenuated Dendrite Branching In Cognitively Impaired Acetylcholinesterase-Transgenic Mice", Journal Of Neurochemistry, International Society For Neurochemistry, Vol. 69(6):2441-2451, (1997)	

Examiner Signature

G. Nichols

Date Considered

6/23/03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

VENABLE
ATTORNEYS AT LAW

Please type a plus sign (+) inside this box

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

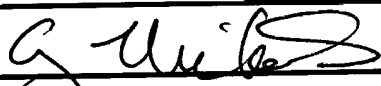
Sheet 4 of 5

Complete if Known

Application Number	Unassigned
Filing Date	February 27, 2002
First Named Inventor	Tatsuya HAGA et al.
Group Art Unit	Unassigned 1647
Examiner Name	Unassigned NICHOLS
Attorney Docket Number	31671-176438

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
CS	A24	"Continuous Cultures Of Fused Cells Secreting Antibody Of Predefined Specificity", Nature, Vol. 256, pp. 495-497, (1975)	—
CS	A25	KOZBOR et al., "The Production Of Monoclonal Antibodies From Human Lymphocytes", Immunology Today, Elsevier Biomedical Press, Vol. 4(3):72-79, (1983)	—
CS	A26	COLE et al., "The EBV-Hybridoma Technique And Its Application To Human Lung Cancer", Monoclonal Antibodies And Cancer Therapy, Alan R. Liss, Inc., pp. 77-96, (1985)	—
CS	A27	SAMBROOK et al., "Molecular Cloning", A Laboratory Manual, Cold Spring Harbor Laboratory Press, Vol. 1-3, 15 pages, (2001)	—
CS	A28	PIETRI-ROUXEL et al., "The Biochemical Effect Of The Naturally Occurring Trp64-Arg Mutation On Human B3-Adrenoceptor Activity", Eur. J. Biochem., FEBS, Vol. 247:1174-1179, (1997)	—
CS	A29	TAKAGI et al., "Epression Of A Cell Adhesion Molecule, Neuropilin, In The Developing Chick Nervous System", Developmental Biology, Academic Press, Inc., Vol. 170, pp. 207-222, (1995)	—
CS	A30	KAWAKAMI et al., "Developmentally Regulated Expression Of A Cell Surface Protein, Neuropilin, In The Mouse Nervous Ssystem", Journal of Neurobiology, Vol. 29(1):1-17, (1996)	—
CS	A31	KANAI et al., "Primary Structure And Functional Characterization Of A High-Affinity Glutamate Trasporter", Letters to Nature, Vol. 360, pp. 467-471, (1992)	—
CS	A32	CASSATA et al., "Rapid Expression Screening Of Caenorhabditis Elegans Homeobox Open Reading Frames Using A Two-Step Polymerase Chain Reaction Promoter-gfp Reporter Construction Technique", Gene, Elsevier Science B.V., Vol. 212, pp. 127-135, (1998)	—
CS	A33	MELLO et al., "Efficient Gene Transfer In C. Elegans: Extrachromosomal Maintenance And Integration Of Transforming Sequences", The EMBO Journal, Oxford University Press, Vol. 10(12):3959-3970, (1991)	—
CS	A34	OKUDA et al., "Identification And Characterization Of The High-Affinity Choline Transporter", Nature Neuroscience, Vol. 3(2):120-125, (2000)	—

Examiner
Signature

Date
Considered

6/23/03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

VENABLE
ATTORNEYS AT LAW

10/069541
PCT/PTO 27 FEB 2002

PTO/SB/08A (08-00)

Approved [redacted] through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office, DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

(use as many sheets as necessary)

Sheet	1	of	5
-------	---	----	---

Complete if Known

Application Number	Unassigned
Filing Date	February 27, 2002
First Named Inventor	Tatsuya HAGA et al.
Group Art Unit	Unassigned 1647
Examiner Name	Unassigned NICHOLS
Attorney Docket Number	31671-176438

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner
Signature**

g. Michel

Date Considered

6/23/03

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

VENABLE
ATTORNEYS AT LAW